# A Quick Look at <u>Inactivated Influenza Vaccines</u> (trivalent and quadrivalent): IIV3, IIV3 High-Dose, Adjuvanted IIV3 (aIIV3), IIV4, IIV4 Intradermal

Annual influenza vaccination is recommended for all persons 6 months of age and older, including all healthy persons!

#### Indications for Use and Schedule

- IIV3 or IIV4 (IM): For persons aged 6 months and older
  - Age range for use varies by brand
- IIV3 High-Dose (IM): For persons aged 65 years and older
- allV3 (IM): For persons aged 65 years and older
- IIV4 Intradermal (ID): For persons aged 18 through 64 years

#### **Key Points:**

- Begin vaccinating as soon as flu vaccine is available and continue throughout the flu season (until vaccine expires)
- No preference for any flu vaccine product for any age group
  Ensure vaccination occurs with an age-appropriate dose
- Some children aged 6 months through 8 years may need 2 doses of seasonal flu vaccine in 2016-17 to best protect them
- Persons aged 9 years and older only need 1 dose of flu vaccine, regardless of previous flu vaccination history

#### Administration<sup>1</sup>

- Administer IIV3 and IIV4 IM
  - Children: 1 inch needle
  - Adolescents/adults: 1-1.5 inch needle
- Administer IIV3 High-Dose and aIIV3 IM
  - Adults: 1-1.5 inch needle
- Administer IIV4 ID only over deltoid area of arm, using the manufacturer's pre-filled syringe
- Administer age-appropriate IIV3 or IIV4 dosage:
  - 6-35 months  $\rightarrow$  0.25 mL (each dose)
  - 3 years and older  $\rightarrow$  0.5 mL (each dose)
- All IIV can be given with all other vaccines

#### Storage and Handling: All IIV

- Store in the refrigerator unit at 36°- 46°F (2°- 8°C)
- Do NOT freeze; keep in original box with lid on/protect from light
- Store different IIV formulations apart and label with age indications
- Do NOT use expired vaccine
- Stand-alone purpose built storage units are preferred

## Information on 2-Dose Influenza Vaccine Pediatric Rule for Children aged 6 Months through 8 Years

- Children aged 6 months through 8 years who received at least 2 doses of any seasonal flu vaccine (IIV3, IIV4, LAIV3, or LAIV4) prior to July 1, 2016, only need 1 dose of 2016-17 flu vaccine
- If a child has not received at least 2 seasonal flu vaccine doses (IIV3, IIV4, LAIV3, or LAIV4) before July 1, 2016, administer 2 doses of 2016-17 flu vaccine separated by 4 weeks
  - Doses of monovalent H1N1 vaccine do not count towards assessment; it is not considered a seasonal flu vaccine
- For further information, refer to "Who Needs 2 Doses of 2016-17 Seasonal Influenza Vaccine?" at www.michigan.gov/flu

## Contraindications (Persons who should not receive IIV3/IIV4)

• Serious allergic reaction (e.g., anaphylaxis) to a previous dose of flu vaccine or one of its components

## Precautions (In certain circumstances may receive IIV3/IIV4)

- Moderate or severe acute illness with or without fever
- History of Guillain-Barré Syndrome (GBS) within 6 weeks of previous flu vaccination
- **Note:** For persons who report an egg allergy, administer any flu vaccine appropriate for recipient's age and health status. If the person reports a reaction to eggs other than hives, flu vaccine should be administered in a medical setting in which a healthcare provider with experience in recognition and management of severe allergic conditions is immediately available.
  - Refer to "2016-17 Influenza Vaccine Screening for Persons who Report Egg Allergy" at www.michigan.gov/flu

## Further points to consider

- Febrile seizures occur in up to 5% of all young children. Following simultaneous administration of IIV and PCV13 and/or DTaP, a CDC study showed a small increased risk for febrile seizures during the 24 hours following vaccination. The Advisory Committee on Immunization Practices (ACIP) considered the risk of febrile seizures after any combination of IIV, PCV13, and DTaP to be small and recommends giving these vaccines simultaneously if needed. For more information, refer to <a href="https://www.cdc.gov/vaccinesafety/concerns/febrile-seizures.html">www.cdc.gov/vaccinesafety/concerns/febrile-seizures.html</a>
- IIV formulations can be given with antiviral medications. For further information, refer to www.cdc.gov/flu
- Use current IIV VIS including information about the Michigan Care Improvement Registry (MCIR) for any brand of IIV3/IIV4. Michigan VIS posted at <a href="https://www.michigan.gov/immunize">www.michigan.gov/immunize</a>
- Document all flu vaccine doses in MCIR on the "Add Imm" screen under "Vaccine" as:
  - IIV3= multi-dose vials as "Influenza IIV3 (Inject)"; in pre-filled syringes (0.5 mL) as "Influenza IIV3 (P-Free, Inj)"
  - IIV4= multi-dose vials as "Influenza IIV4 (Injectý"; in pre-filled syringes (0.25 mL) as "Influenza IIV4 Ped (P-Free Inj)"; in pre-filled syringes (0.5 mL) and single-dose vials (0.5 mL) as "Influenza IIV4 (P-Free Inj)"
- IIV3 High-Dose= "Influenza IIV3 High Dose"; aIIV3= "Influenza aIIV3 (Fluad P-free inj)"; IIV4 ID= "Influenza IIV4 Intradermal (P-Free Inj)"
- Document type of flu vaccine given on vaccine administration record and record card as "IIV3," "IIV4," "IIV3 High-Dose", "aIIV3" or "IIV4 ID"
- ACIP has not expressed a preference between any IIV3 (including IIV3 High-Dose and aIIV3) and IIV4 (including IIV4 ID) formulation
- There is one IIV3 and one IIV4 formulation not included on this form; refer to package inserts for information on Recombinant Inactivated Vaccine, trivalent (RIV3, Flublok, Protein Sciences) or Cell-Cultured Inactivated Influenza Vaccine, quadrivalent (ccIIV4; Flucelvax, Segirus)

'Assessment of needle size and site of injection must be made for each person based on size of the muscle, thickness of adipose tissue at the injection site, volume of the material to be administered, and injection technique. For further information, see Epidemiology and Prevention of Vaccine-Preventable Diseases, 13th edition, Chapter 6 at: <a href="http://www.cdc.gov/vaccines/pubs/pinkbook/index.html">http://www.cdc.gov/vaccines/pubs/pinkbook/index.html</a>.

For further guidance on the influenza vaccine recommendations, refer to the "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the ACIP, U.S., 2016-17 Influenza Season," MMWR, Vol. 65(5); 1-54, 8/26/16 located at <a href="https://www.cdc.gov/mmwr">www.cdc.gov/mmwr</a>.

Publicly purchased flu vaccine can be administered to eligible children aged 6 months through 18 years through the Vaccines for Children (VFC) program in private providers' offices. Eligible children include those who are uninsured, underinsured, Medicaid eligible, American Indians and Alaskan Natives. For more information and additional forms regarding flu vaccination, contact your local health department, visit Michigan Department of Health and Human Services at <a href="https://www.michigan.gov/flu">www.cdc.gov/flu</a> or <a href="https://www.cdc.gov/mmwr">www.cdc.gov/mmwr</a>.